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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,205	12/07/2001	Philip P. Carvey	2390.1006-009	9706
21005 7590 08/20/2008 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133				
EXAMINER				
LEE, ANDREW CHUNG CHEUNG				
ART UNIT		PAPER NUMBER		
2619				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/021,205

**Applicant(s)**

CARVEY ET AL.

**Examiner**

Andrew C. Lee

**Art Unit**

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 5, 7 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7, 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Claims 1, 3, 5, 7, 10 are pending.

Claims 2, 4, 6, 8, 9, 11, 12, 13 14 had been canceled.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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2. Claims 1, 3, 5, 7, are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 4, 10, 11, 16, 19, 23, 24 of U.S. Patent No. 6359879 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the present claims and patented application recited as indicated below:

Present/Current Application 1002105	Patent No. US 6359879 B1
<p>1. A network router <b><i>to route Internet Protocol (IP) data packets</i></b> comprising: a plurality of trunk ports, including a composite port of plural ports to plural trunks which serve as a composite trunk to a common destination;</p> <p>a routing fabric configured to transfer <b><i>the IP</i></b> data packets between trunk ports; and</p> <p>an output port selector <b><i>configured to use a destination IP address of the IP data packets</i></b> to select an output port for <b><i>the IP</i></b> packets from the composite port, the output port selector</p> <p><b><i>balancing load across the trunks of the composite trunk</i></b></p>	<p>3. A network router comprising;</p> <p>a plurality of trunk ports, including a composite port of plural ports to plural trunks which serve as a composite trunk to a common destination;</p> <p>a routing fabric for transfer of data packets between trunk ports; and</p> <p>an output port <b><i>selector which selects</i></b> an output port for a packet from a composite port,</p> <p>the output port <b><i>selector favoring output ports having lesser distances to be traversed on the routing fabric from an input port.</i></b></p> <p>10. A router as claimed in claim 5 wherein the output port selector</p>

<p>according to dynamically adjustable weighting, the load approaching balance across the trunks.</p>	<p>balances load across the trunks of a composite trunk.</p> <p>11. A router as claimed in claim 5 wherein the output port selector dynamically balances load across the trunks of a composite trunk.</p>
<p>3. A network router <b>to route Internet Protocol (IP) data packets</b> comprising:</p> <p>a plurality of trunk ports, including a composite port of plural ports to plural trunks which serve as a composite trunk to a common destination;</p> <p>a routing fabric configured to transfer <b>the IP</b> data packets between trunk ports; and</p> <p>an output port selector <b>configured to use a destination IP address of the IP data packets to</b> select an output port for <b>the IP data packets</b> from the composite port according to a table, the table routes being</p> <p>dynamically adjustable for a load to approach balance across the trunks.</p>	<p>4. A network router comprising:</p> <p>a plurality of trunk ports, including a composite port of plural ports to plural trunks which serve as a composite trunk to a common destination;</p> <p>a routing fabric for transfer of data packets between trunk ports; and</p> <p>an output port selector which selects an output port for <b>a packet</b> from a composite port, the output port selector comprising a routing table which maps destination addresses to composite trunks.</p> <p>11. A router as claimed in claim 5 wherein the output port selector dynamically balances load across the trunks of a composite trunk.</p>
<p>5. A method of routing <b>Internet Protocol (IP) data</b> packets in a network <b>router</b> comprising:</p> <p>identifying a destination of the <b>IP data</b> packets;</p> <p>selecting one of plural trunks forming a composite trunk to the destination <b>based on a destination IP address of the IP</b></p>	<p>16. A method of routing packets in a network comprising:</p> <p>identifying a destination of the packets;</p> <p>selecting one of plural trunks forming a composite trunk to the destination, the trunk being selected <b>to maintain</b></p>

<p><b>data packets</b>, the trunk being selected with</p> <p>dynamically <b>adjustable weighting to</b> balance load across the trunks of a composite trunk,</p> <p>the load approaching balance across the trunks; and</p> <p>forwarding the <b>IP data</b> packets toward the destination on the selected trunk.</p>	<p><b>ordering of packets within a flow by routing the packets of the flow on a single trunk of a composite trunk; and</b></p> <p>24. A method as claimed in claim 20 wherein the trunk is selected to dynamically balance load across the trunks of a composite trunk.</p> <p>23. A method as claimed in claim 20 wherein the trunk is selected to balance load across the trunks of a composite trunk.</p> <p>forwarding the packets toward the destination on the selected trunk.</p>
<p>7. A method of routing <b>Internet Protocol (IP) data</b> packets in a network router comprising:</p> <p>identifying a destination of the <b>IP data</b> packets;</p> <p>selecting one of plural trunks forming a composite trunk to the destination <b>based on a destination IP address of the IP data packets</b>, the trunk being selected according to a table, the table routes being</p> <p>dynamically adjustable for a load to approach balance across the trunks; and</p> <p>forwarding the IP data packets toward the destination on the selected trunk.</p>	<p>19. A method of routing packets in a network comprising:</p> <p>identifying a destination of the packets;</p> <p>selecting one of plural trunks forming a composite trunk to the destination, the step of selecting one of plural trunks including the step of determining a composite trunk from a destination address through routing table lookup; and</p> <p>24. A method as claimed in claim 20 wherein the trunk is selected to dynamically balance load across the trunks of a composite trunk.</p> <p>forwarding the packets toward the destination on the selected trunk.</p>

Reference Patent No. US 6359879 B1 discloses all the limitations except destination IP address of the IP data packets and balancing load. Reference US 6591303 B1 in the same field of endeavor teaches the destination IP address of the IP data packets and balancing load ("load balancing"...."IP address"; col. 5, LINES 4 – 15). At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Reference Patent No. US 6359879 B1 to include the features of destination IP address of the IP data packets and balancing load as taught by Reference US 6591303 B1. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for parallel trunking of interfaces to increase transfer bandwidth between network devices (as suggested by Reference Patent No. US 6359879 B1, see col. 1, lines 9 – 10).

### ***Response to Arguments***

3. Applicant's arguments, see pages 6 and 7, filed on 5/22/2008, with respect to claims 1, 3, 5, 7, 10 have been fully considered and are persuasive. The rejection of claims 1, 3, 5, 7, 10 has been withdrawn. The claims will be allowable if and only if the double patenting will be overcome.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Tsuchiya et al. (5115495).

- b) Berstein et al. (5155594).
  - c) Meier (5748619).
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/  
Examiner, Art Unit 2619  
<8/06/2008>



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/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619